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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/538,399

06/05/2006

Marten Stjernstrom

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EXAMINER

GAKH, YELENA G

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/538,399	Applicant(s) STJERNSTROM ET AL.	
	Examiner Yelena G. Gakh, Ph.D.	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 1-3 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 June 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>06/09/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Election of claims 4-10 without traverse filed on 07/06/09 is acknowledged. Claims 1-3 are withdrawn from consideration. Claims 4-10 are considered on merits.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings are very confusing. For example, Figure 1b) is supposed to show the rim 11a, which should be in-between the wall of the pit 13a and the receiving surface 5. However, it is impossible to see any rim in-between the wall and the surface, and it appears that the rim is a part of the wall. Moreover, it is not clear, how any of the wall, the pit, the bottom of the pit, or the sample receiving surface can have different hydrophilic/hydrophobic properties, if they are all coated with the same hydrophobic layer 17?

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The annotation Fig. 1a) and Fig. 1b) should be changed to Figure 1, a) and b) and Fig. 2a), Fig. 2b), etc. to Figure 2 a), b), etc., since these are the unified figures, which cannot be separated.

Specification

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification is objected to as not containing "a written description of the invention ... in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same". In particular, it is not clear, what is defined as the rims 11a-11n of the pits 9a-9n. By definition, the "rim" is the outer curved part, which is supposed to outstand on the surface surrounding the pit, as it could be guessed from the first view of the substrate depicted on Figure 1a. However, on the side view Fig. 1b no rim outstanding from the surface of the substrate surrounding the pit can be seen. The surface of the substrate appears to be smooth, with no outstanding elements. It makes it unclear, as to what the rim is. The rim is presumably an important structural element of the target slide of the instant application, since it is exactly the rim that is supposed to be hydrophobic. It is not really clear, whether the rim is a part of the substrate surface, or a part of the pit wall. Since the pit is a shallow well on the substrate, and the rim is supposed to be a part of the pit, the examiner considers the rim to be the part of the pit wall, since there is no other place, which can be called the rim. The drawing does not show any place between the surface of the slide and the wall of the pit, which can be called the rim. Furthermore, according to Figures 1b) and Figures 2a)-2)c there is a continuous coating for the pit and the surrounding surface, so it is even mess clear, as to which rim the specification discloses. Furthermore, as it is indicated above, Figure 1b) is supposed to show the rim 11a, which should be in-between the wall of the pit 13a and the receiving surface 5. However, it is impossible to see any rim in-between the wall and the surface, and it appears that the rim is a part of the wall. Moreover, it is not clear, how any of the wall, the pit, the bottom of the pit, or the sample receiving surface can have different hydrophilic/hydrophobic properties, if they are all coated with the same hydrophobic layer 17? The disclosure regarding the structure of the target slide is very confusing.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4-10 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims recite the rim between the sample receiving surface and the wall of the pit, which is not a clear definition, since the specification does not describe and the drawings do not show any space between the sample receiving surface and the wall of the pit. Furthermore, the drawings clearly indicate the uniform coating in the pit and on the substrate surface, which makes it even less clear, as to what the rim really is. This renders the claims unclear and indefinite. For the purpose of examination the examiner considers the rim a part of the wall of the pit.

Furthermore, the claim recites that the rim is more hydrophobic than the substrate, which the substrate is recited as comprising the rim. This makes the language of claim totally unclear. Moreover, as can be seen from Figure 1(b) and as recited in claim 8, the substrate is coated with a hydrophobic material, therefore, if the substrate is hydrophobic, how can the rim be even more hydrophobic? Also, from Figure 2 it follows that the whole substrate, inclosing the pit with its walls and bottom, the rim, is uniformly coated with the hydrophobic layer 17.

Furthermore, claim 8 recites the substrate of the slide coated with hydrophobic material - in this case, it becomes unapparent, as to what is the rim, which is supposed to be more hydrophobic, then the substrate, if the substrate is totally covered with the hydrophobic material?

The language of the claims at present is so unclear and indefinite regarding the structure of the target slide and the hydrophobic and hydrophilic parts of the substrate, that the examiner does not find it plausible to search for any specific structure in the prior art.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. *Fox (US 5,229,163)* discloses a process for preparing a microtiter tray, which

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comprises wells (pits) with the bottom of the well which is substantially hydrophilic and the sidewall, which is substantially hydrophobic. "One can coat the inner surface 30 with the hydrophobic material and the inner surface 32 with the hydrophilic material" (col. 5, lines 9-12).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yelena G. Gakh, Ph.D. whose telephone number is (571) 272-1257. The examiner can normally be reached on 9:30 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vickie Y. Kim can be reached on (571) 272-0579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Yelena G. Gakh/
Primary Examiner, Art Unit 1797

7/31/2009